

with information in a format (e.g., floating point representation or date representation) that is familiar to the user.

Referring to Fig. 7b, that figure illustrates a flow chart of a process performed by the resource program in accordance with another embodiment consistent with methods, systems, and articles of manufacture consistent with the present invention. The sequence of steps depicted in Fig. 7b may be executed by the data processing system 600 shown in Fig. 6, however, Fig. 7b is not limited thereto. Fig. 7b particularly outlines steps for receiving resource data depending on a user parameter from a user (e.g. in a local language or format), and for converting the received resource data into a resource identifier independent of the user parameter. The following description of the process of Fig. 7b illustratively refers to the data processing system 600 of Fig. 6.

In step S5b1, the user parameter component 181 receives a user parameter for setting a user environment from the client 40. However, it is also possible that the user parameter is already stored in memory 130, for example, in an object.

In step S5b2, the application component 182 executes an application that is controlled by the client 40, and receives resource data dependent on the user parameter from the client 40. For example, the client 40 could transmit a date in a local format to the resource program.

In step S5b3, the lookup component 183 retrieves a resource identifier based on the received resource data, the resource identifier being independent of the user parameter. The resource program may use the resource identifier for internal processing. The resource program may then output a processing result to the user.

The process depicted in Fig. 7b may use resource functions as outlined with respect to previous embodiments and facilitate converting information provided by a user in a local format or language into a representation which is independent of the locality or language of the user.

Referring to Fig. 8, that figure illustrates a time sequence of processing steps a performed by the resource program in accordance with another embodiment consistent with methods, systems, and articles of manufacture

consistent with the present invention. Fig. 8 outlines steps for providing resource data (i.e., localized data to a client), similar to the embodiment described above with reference to Fig. 5a. The sequence of processing steps may be executed by the data processing system 600 depicted in Fig. 6, however, Fig. 8 is not limited thereto. The following description of Fig. 8 illustratively refers to the data processing system 600 of Fig. 6.

Fig. 8 shows processing steps involving a client 40, resource program 180, a lookup object. Even though the lookup object may comprise a code section executed at the resource program, for illustration purposes, the lookup object is shown as a separate entity.

In step 804, the resource program receives a user parameter from the client. The user parameter specifies a user environment, such as a location or a preferred language. The user parameter is stored by the resource program in memory 130, for example, in a list of user parameters associated with a client identifier.

In step 802, the application component 182 of the resource program executes an application independent of the user parameter, and, in connection therewith, reads a resource identifier identifying a resource independent of the user parameter. Further, in step 802, the lookup component 183 combines the user parameter with the resource identifier to obtain a string identifier, for example, discussed above with reference to Fig. 5a.

In step 803, the lookup component 183 transmits the string identifier from the resource program to the lookup object.

In step 804, the lookup component 183 retrieves corresponding resource data based on the transmitted string identifier. An example of this step is described above with reference to Fig. 5a.

In step 805, the lookup component 183 transmits the resource data to the client for local display at the client. The resource data, as outlined with respect to previous embodiments, may represent expressions in a language corresponding to the selected user parameter.

Further, in case the resource data are associated with a resource function, as outlined with respect to previous embodiments, for example in case a current

date or time was retrieved and is to be presented to the user in a particular format, corresponding operations may be executed by the resource program, as indicated by step 806.

In step 807, the lookup component 183 provides the resource data to the client in a format corresponding to the user parameter.

The lookup component 183 may also transmit the resource data directly from the lookup object to the client in step 805.

The embodiment described with reference to Fig. 8 provides a user with "localized information", such as expressions in a particular language corresponding to the user parameter or representations of for example date or time, in a format corresponding to the user parameter.

Referring to Fig. 9, that figure illustrates a time sequence of processing steps a performed by the resource program in accordance with another embodiment consistent with methods, systems, and articles of manufacture consistent with the present invention. Fig. 9 outlines steps for providing a client with resource data in correspondence to a selected user parameter. The sequence of processing steps may be executed by the data processing system 600 depicted in Fig. 6, however, Fig. 9 is not limited thereto. The following description of Fig. 9 illustratively refers to the data processing system 600 of Fig. 6.

Fig. 9 shows processing steps involving a client, the resource program, a dictionary function, and a lookup object. Even though the dictionary function and the lookup object may comprise code sections executed by the resource program, the dictionary function and the lookup object are shown as separate entities.

In step 901, the user parameter component 181 of the resource program receives a user parameter that was selected by the client in correspondence to the client, for example, for storage in an object containing client identifiers in association with user parameters.

In step 902, the resource program transmits the user parameter to the dictionary function.